

CLAIMS

1. A method of fabricating a surface mount semiconductor device package with a focusing cup, comprising the steps of:

preforming folded metal frames, each having a top surface for contacting an electrode of a semiconductor device and bottom surface serving as a contact for surface mounting to a motherboard, and

casting glue over said metal frames to form a cup over said top surface for focusing light emitted from said semiconductor device without covering the area for contacting said electrode and to adhere to said top surface as a unitary structure.

2. A method of fabricating a surface mount semiconductor device package as described in claim 1, wherein said folded metal frames are folded inward.

3. A method of surface mount semiconductor device package as described in claim 1, wherein said folded metal frames are folded outward.

4. A method of fabricating a surface mount semiconductor device package as described in claim 1, wherein said semiconductor device is a diode.

5. A method of fabricating a surface mount semiconductor device package as described in claim 1, wherein said cup is contoured to focus said light.

6. A method of fabricating a surface mount semiconductor device package as described in claim 1, wherein said cup is lined with reflecting coating.

7. A method of fabricating a surface mount semiconductor device package as described in claim 1, wherein the top surfaces of said metal plates are shaped to mate with the bonding pads of the semiconductor device.

8. A method of fabricating a surface mount semiconductor device package as described in claim 7, wherein the top surfaces of the metal plates are of same shape.

9. A method of fabricating a surface mount semiconductor device package as described in claim 7, wherein the top surfaces of the metal plates are of different shapes.

10. A surface mount semiconductor device package fabricated by:

preforming folded metal frames, each having a top surface for contacting an electrode of a semiconductor device and bottom surface serving as a contact for surface mounting to a motherboard, and

casting glue over said metal frames to form a cup over said top surface for focusing light emitted from said semiconductor device without covering the area for contacting said electrode and to adhere to said top surface as a unitary structure.